REMARKS/ARGUMENTS

Claims 1-39 are in the application. Claims 1-39 stand rejected. These arguments show all claims to be allowable of all the cited references. claims 1 and 23 are amended herein to better protect the invention for the applicants. No new matter is included. In order to simplify the examination of this response, the following remarks follow the flow of the office action.

Claim Rejections - 35 USC § 102

The office action states, *"(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 37 1 (c) of this title before the invention thereof by the applicant for patent.*

Claims 1-5, 12-16, 23, 25-28, 30, 33-35 and 38 are rejected under 35 U.S.C., 102(e) as being anticipated by Doucer et al, U.S. Patent No. 5,995,971.

In response, applicants respectfully state that Doucer et al., describe a process for searching for a key in a Patricia Tree. Applicants claim 1 is for classifying a packet by passing a packet through a tree. Doucer et al., do not perform the steps and or functions of the claims in the present invention. Thus Claims 1-5, 12-16, 23, 25-28, 30, 33-35 and 38 are allowable under 35 U.S.C., 102(e) as not being anticipated by Doucer et al, U.S. Patent No. 5,995,971. However, in the interest of being totally responsive applicants will reply to each separate statement of rejection.

The office action further states, *"As per claim 1, Doucer disclose a method for classifying a data packet, the method comprising: receiving the data packet at a root node of a classification tree (column 17, lines 1-5); successively passing the data packet to each child of a first tree level until a first child of the first tree level of the classification tree indicates a satisfaction of a node-criteria of said first child, and the first child forming said data packet into a matched packet (column 17, lines 5-10); and repeating the step of passing and forming for a next tree level until no first child of said next level at a succeeding next level indicates satisfaction of the node-criteria of said first child of said next level (column 16, lines 50-67).*

Applicants respectfully state that review of claim 1 indicates that it is not anticipated by Doucher et al. Original claim 1 reads:

1. A method for classifying a data packet, the method comprising:

receiving the data packet at a root node of a classification tree;

successively passing the data packet to each child of a first tree level until a first child of the first tree level of the classification tree indicates a satisfaction of a node-criteria of said first child, and the first child forming said data packet into a matched packet; and

repeating the step of passing and forming for a next tree level until no first child of said next level at a succeeding next level indicates satisfaction of the node-criteria of said first child of said next level.

Applicants respectfully state that Doucer et al., do not implement any of the steps in claim 1. A review of the referenced lines in Doucer et al., are not concerned with receiving a data packet, but rather are provided with a search key. Doucer et al., take pieces of the packet to create a search key and passes the search key. Doucer et al., pass the key down the Patricia trie and searches to determine whether the key is stored in this trie. It has no similarity to the present invention in claim 1, which receives a data packet, not just a piece of a packet. Furthermore Doucer et al., do not pass the data packet to each child of the tree. Certainly Doucer et al., do not pass the packet until satisfaction of a node criteria is reached.

Claim 1, steps 2 and 3, require satisfaction of a node criteria. The present specification, page 11, lines 22-25, reads, "A child node's node-criteria includes a set of code used to

identify the packets desired. This set of code is implemented as a function referred to as the packet matching function *(pm)* 603 . " A review of the referenced lines in Doucer et al. show no reference or concern of 'node-criteria'. Doucher et al., is not concerned with a node-criteria [which] includes a set of code used to identify the packets desired. Thus claim 1, and all claims that depend thereupon are allowable over Doucer et al.

However, in order to better protect the present invention for the applicant, the words "packet matching function" are added into the second and third steps of claim 1, as shown in amended claim 1 above. This has basis in the sentence quoted above from the specification. A 'node-criteria packet matching function' is in no way relevant to any of the cited references.

> The office action further states, *"As per claim 2, Doucer discloses a method as recited in claim 1, wherein the step of passing includes executing a set of code which returns a status indication (column 17, lines 45-50)*

In response, applicants respectfully state that Doucer et al., in column 17, lines 45-50 just return a search result. Doucer et al., do not execute a set of code to indicate a satisfaction of a node criteria, as in claim 2. Thus claim 2 is allowable over Doucer et al., in its own right, and because it depends on an allowable claim.

> The office action further states, *"As per claim 3, Doucer discloses a method as recited in claim 1, wherein the step of forming includes the first child specifying a set of code to be run subsequently (column 15, lines 50-65- column 16, lines 27-45).*

In response, applicants respectfully state that a review of the lines indicated in columns 15 and 16 do not include 'specifying a set of code to be run subsequently.' Thus claim 3 is allowable over Doucer et al., in its own right, and because it depends on an allowable claim.

> The office action further states, *" As per claim 4, Doucer discloses a method as recited in claim 3, wherein the step of specifying includes specifying the set of code to be run following satisfaction (column 17, lines 45-50).*

In response, applicants respectfully state that a review of Doucer et al., column 17 does matching and indeed does not 'specify code to be run following satisfaction'. Thus claim 4 is allowable over Doucer et al., in its own right, and because it depends on an allowable claim.

> The office action further states, *"As per claim 5, Doucer discloses A method as recited in claim 1, further comprising dynamically adding at least one node in at least one level of the classification tree (column 18, lines 45-56).*

In response, applicants respectfully state that Doucer et al., do not add a node for classifying based on a node criteria. Thus claim 5 is allowable over Doucer et al.

Claim 6 is apparently not alluded to in any of the paragraphs of the office action, not is it in any of the references and is therefore allowable in its own right, *and because it depends on an allowable claim.*

> The office action further states, *"As per claim 12, Doucer discloses a method as recited in claim 1, further comprising the step of parsing said matched packet and generating relevant information (column 9, lines 40-61)*

In response, applicants respectfully state that a review of the referenced lines in Doucer et al., lines 40-61, do not indicate any step of 'parsing or generating relevant information.' Thus claim 12 is allowable over Doucer et al., in its own right, and because it depends on an allowable claim.

> The office action further states, *"As per claim 13, Doucer discloses a method as recited in claim 1. further comprising the step of transforming said matched packet into a transformed packet (column 4, lines 62-67).*

In response, applicants respectfully state that a review of the referenced lines in Doucer et al., lines 62-67, do not transform a matched packet into a transformed packet. Thus claim 13 is allowable over Doucer et al., in its own right, and because it depends on an allowable claim.

The office action further states, *"As per claim 14, Doucer discloses a method as recited in claim 1, further comprising associating the packet with a last first child indicating satisfaction (column 16, lines 50-60).*

In response, applicants respectfully state that a review of the referenced lines in Doucer et al., do not appear to be concerned with a last first child indicating satisfaction. Thus claim 14 is allowable over Doucer et al., in its own right, and because it depends on an allowable claim.

The office action further states, *"As per claim 15, Doucer discloses a method as recited in claim 14, further comprising executing a set of code in accordance with said last first-child (column 32, lines 43-49).*

In response, applicants respectfully state that a review of the referenced lines in Doucer et al., only explain how to traverse a trie, they apparently do not explicitly indicate executing a set of code associated with "said last first-child". Thus claim 15 is allowable over Doucer et al.

The office action further states, *"As per claim 16, Doucer discloses a method as recited in claim 1, further comprising determining a disposition of the data packet (column 18, lines I- 13).*

In response, applicants respectfully state that a review of the referenced lines in Doucer et al., do not determine disposition of data packet based on node criteria. Thus claims 16 is allowable over Doucer et al.

The office action makes no reference to claim 22, thus claim 22 is allowable over all cited art.

The office action further states, *"As per claim 23, Doucer discloses a method as recited in claim I, further comprising employing the classification process for application level classification (column 9, lines 5-1 1; column I 1, lines 48-60- column 3 1, lines 40-57).*

In response, applicants respectfully state that a review of the referenced lines in Doucer et al., which show that employing a static search key is not related to claim 23, which is

based on node criteria. However in order to better protect the invention for the applicant the word "dynamic" is being added to claim 23. This will serve the applicants in providing claim differentiation. The word dynamic is used repeatedly in the specification and is not new matter. For example, page 16 line 27 to page 17 line 2, reads, "The packet matching function uses the dynamic data as part of the node-criteria for application level packet classification." Certainly none of the referenced art are concerned with 'dynamic data as part of the node-criteria for application level packet classification.'

> The office action further states, *"As per claim 25, Doucer discloses a method as recited in claim 23, further comprising employing the classification process for rate limiting (column 1, lines 60-67; column 2, lines 110 and 42-56).*

In response, applicants respectfully state that a review of the referenced lines in Doucer et al., show that Doucer et al., employing a static search key is not related to claim 25, which is based on node criteria. Also claim 25 depends on an allowable claim, and therefore is allowable.

> The office action further states, *"As per claim 26, Doucer discloses a method as recited in claim 23, further comprising employing the classification process for load balancing (column 1, lines 60-67- column 2, lines 1-10 and 42-56).*

In response, applicants respectfully state that a review of the referenced lines in Doucer et al., show that Doucer et al., employing a static search key is not related to claim 26, which is based on node criteria. Also claim 26 depends on an allowable claim, and therefore is allowable.

> The office action further states, *"As per claim 27, Doucer discloses a method as recited in claim 1, further comprising employing the classification process to shape traffic (column 1, lines 56-57; column 2, lines 42-56).*

In response, applicants respectfully state that a review of the referenced lines in Doucer et al., show that Doucer et al., shaping of traffic employing a static search key is not related

to claim 27, which is based on node criteria. Also claim 27 depends on an allowable claim 1 and therefore is allowable.

> The office action further states, *"As per claim 28, Doucer discloses an apparatus to classify a data packet, the apparatus comprising: a network interface device to receive the data packet from the physical network and pass the data packet to the root node of a classification tree, and the reverse, to receive the data packet from the root node and send the data packet to the physical network (column 16, lines 50-67-, column 17, lines 1-10); a packet module to successively pass the packet from child node to child node at a next tree level until a first child node of the next tree level of the classification tree which indicates a satisfaction of a node-criteria of the first child node, and to form the data packet into a matched packet until no first child node of at a succeeding next level indicates satisfaction of the first node-criteria of the first child node of the succeeding next level (column 16, lines 47-60).*

In response, applicants respectfully state that Doucer et al., do not implement any of the elements in claim 28. Firstly Doucer et al., are not receiving data packets, but rather are provided a search key. Doucer et al., take pieces of the packet to create a search key and passes the search key. Doucer et al., pass the key down the Patricia trie and searches to determine whether the key is stored in this trie. It has no similarity to the present apparatus in claim 28 which receives a data packet, not just a piece of a packet. Furthermore Doucer et al., do not pass the data packet to each child of the trie. Certainly Doucer et al., do not pass the packet until satisfaction of a node criteria is reached. Thus claim 28 is allowable, as are all claims that depend upon it are also allowable.

> The office action further states, *"As per claim 30, Doucer discloses an apparatus as recited in claim 28, wherein the apparatus is employed for application level classification (column 9, lines 5-1 1; column I 1, lines 48-60; column 3 1, lines 40-57).*

In response, applicants respectfully state that a review of the referenced lines in Doucer et al., for employing a static search key, is not related to the apparatus of claim 30 which is based on node criteria. Thus claim 30 is allowable over Doucer et al., in its own right, and because it depends on an allowable claim.

> The office action further states, *"As per claim 33, Doucer discloses a method as recited in claim 2, wherein the status indication is of the pmt type (See Figure 14).*

In response, applicants respectfully state that a review of the referenced lines in Doucer et al., for employing a static search key, is not related to the apparatus of claim 33 which is based on node criteria. Thus claim 33 is allowable over Doucer et al., in its own right, and because it depends on an allowable claim.

Also, since claim 33 is dependent upon an allowable claim, it is in itself allowable over Doucer et al.

> The office action further states, *"As per claim 34, Doucer discloses an article of manufacture comprising a computer-usable medium having computer readable program code means embodied therein for causing classification of a data packet, the computer readable program code means in said article of manufacture comprising computer readable program code means for causing a computer to effect the steps of claim I (column 4, lines 30-42).*

In response, applicants respectfully state that Doucer et al., describe a process for searching for a key in a Patricia Tree. A review of the referenced lines in Doucer et al., find no disclosure of an article of manufacture comprising a computer-usable medium having computer readable program code means embodied therein for causing classification of a data packet. Applicants claim 34 based on claim 1, is for an article of manufacture for classifying a packet by passing a packet through a tree. Doucer et al., do not perform the steps and or functions of the claim 34. Applicants respectfully state that Doucer et al., do not implement any of the steps in claim 34. A review of the referenced lines in Doucer et al., are not concerned with receiving a data packet, but rather are provided with a search key. Doucer et al., take pieces of the packet to create a search key and passes the search key. Doucer et al., pass the key down the Patricia trie and searches to determine whether the key is stored in this trie. It has no similarity to the present invention in claims 1 and 34, which receive a data packet, not just a piece of a packet. Furthermore Doucer et al., do not pass the data packet to each child of the tree. Certainly Doucer et al., do not pass the packet until satisfaction of a node criteria is reached.

Claim 34 requires satisfaction of a node criteria. The present specification, page 11, lines 22-25, reads, "A child node's node-criteria includes a set of code used to identify the packets desired. This set of code is implemented as a function referred to as the packet

matching function (pm) 603 . " A review of the referenced lines in Doucer et al. show no reference or concern of 'node-criteria'. Doucher et al., is not concerned with a node-criteria [which] includes a set of code used to identify the packets desired. Also, a 'node-criteria packet matching function' is in no way relevant to any of the cited references. Thus claim 1, and claim 34 that depends thereupon are allowable over Doucer et al.

> The office action further states, *"As per claim 35, Doucer discloses an article of manufacture as recited in claim 34, the computer readable program code means in said article of manufacture further comprising computer readable program code means for causing a computer to effect dynamically adding at least one node in at least one level of the classification tree (column 6, lines 18-30).*

In response, applicants respectfully state that a review of the referenced lines in Doucer et al., show that Doucer et al., is static and do not allude to computer readable program code means for causing a computer to effect dynamically adding at least one node in at least one level of the classification tree. Furthermore, a review of the referenced lines in Doucer et al., for employing a static search key, is not related to the article of manufacture of claim 35 which is based on node criteria. Thus claim 35 is allowable over Doucer et al., in its own right, and because it depends on an allowable claim.

> The office action further states, *"**As per claim 38, Doucer discloses an apparatus** for classifying a **data packet, the apparatus comprising:** means for receiving the data packet at a root node of a classification tree (column 17, lines 1-5);*
>
> *means for successively passing the data packet to each child of a first tree level until a first child node of the first tree level of the classification tree indicates a satisfaction of a node-criteria of said first child node, and the first child node forming said data packet into a matched packet (column 17, lines 5-10); and means for repeating the steps of passing and forming for a next tree level until no first child node of said next tree level at a succeeding next level indicates satisfaction of the node-criteria of said first child node of said succeeding next level (column 17, lines 50-67).*

In response, applicants respectfully state that Doucer et al., do not implement any of the steps in claim 38. A review of the referenced lines in Doucer et al., are not concerned with receiving a data packet, but rather are provided with a search key. Doucer et al., take pieces of a packet to create a search key and passes the search key. Doucer et al., pass the

key down the Patricia trie and searches to determine whether the key is stored in this trie. It has no similarity to the present invention in claim 38, which receives a data packet, not just a piece of a packet. Furthermore Doucer et al., do not pass the data packet to each child of the tree. Certainly Doucer et al., do not pass the packet until satisfaction of a node criteria is reached.

Claim 38 requires satisfaction of a node criteria. The present specification, page 11, lines 22-25, reads, "A child node's node-criteria includes a set of code used to identify the packets desired. This set of code is implemented as a function referred to as the packet matching function (*pm*) 603." A review of the referenced lines in Doucer et al. show no reference or concern of 'node-criteria'. Doucher et al., is not concerned with a node-criteria [which] includes a set of code used to identify the packets desired. Thus claim 38 is allowable over Doucer et al.

> The office action further states, *"Claims 7-11, 17-21, 36-37, and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Edwards et al. U.S. Patent No. 6,320,848. See abstract.*

In response, applicants respectfully state that a review of Edwards et al., shows that Edwards et al., is related to changing from one decision tree to another decision tree, not to classifying a packet but rather to managing a tree. This is not relevant to claim 7-11, 17-21, 36-37, and 39, for classifying a packet. Applicants claim 7 is for classifying a packet by, "suspending a packet classification process in progress for said packet; and obtaining external information employed in said classifying." Edwards et al., do not perform the steps and or functions of these claims in the present invention. Thus Claims 7-11, 17-21, 36-37, and 39 are allowable under 35 U.S.C., 102(e) as not being anticipated by Doucer et al, U.S. Patent No. 5,995,971. However, in the interest of being totally responsive applicants will reply to each separate statement of rejection.

> The office action further states, *"As per claim 7, Edwards discloses a method for classifying a packet, said method comprising suspending a packet classification*

process in progress for said packet (column 5, lines 24-30); and obtaining external information employed in said classifying (column 3, lines 22-29; column 4, lines 1-19).

In response, applicants respectfully state that a review of the referenced lines in Edwards et al., shows that Edwards et al., is related to changing from one decision tree to another decision tree, not to classifying a packet but rather to managing a tree. This is not relevant to claim 7 for classifying a packet or suspending a packet classification in process or obtaining external information employed in classifying. Thus claim 7 is allowable over Edwards.

The office action further states, *"As per claim 8, Edwards discloses a method in claim 7, wherein the step of obtaining includes augmenting a node-criteria of a node in a classification tree with external information (column 3, lines 22-29; column 4, lines 9-19).*

In response, applicants respectfully state that a review of Edwards et al., do not indicate any augmenting of a node criteria in a classification tree. Claim 8 and those that depend thereon, require satisfaction of a node criteria. The present specification, page 11, lines 22-25, reads, "A child node's node-criteria includes a set of code used to identify the packets desired. This set of code is implemented as a function referred to as the packet matching function *(pm)* 603 . " A review of the referenced lines in Edwards et al. show no reference or concern of 'node-criteria'. Edwards et al., is not concerned with a node-criteria [which] includes a set of code used to identify the packets desired. Edwards et al., defines a set of predefined node types, not node criteria packet matching functions. Thus claim 8 and all claims that depend thereupon are allowable over Edwards.

The office action further states, *"As per claim 9, Edwards discloses a method as in claim 8, wherein the external information includes identification of the originator of said packet (column 1, lines 19-26; column 3, lines 43-48).*

In response, applicants respectfully state that a review of Edwards et al., do not indicate getting any identification of the originator of said packet from external information as in

claim 9, but rather from a packet. header. Thus claim 9 is allowable over Edwards et al., on its own right, and because it depends on an allowable claim.

> The office action further states, *"As per claim 10, Edwards discloses a method as in claim 8, wherein the external information includes authentication of an originator of said packet (column 1, lines 19-26; column 3, lines 43-48).*

In response, applicants respectfully state that a review of Edwards et al., do not indicate getting any authentication of the originator of said packet from external information as in claim 10, but rather from a packet. header. Thus claim 10 is allowable over Edwards on its own right, and because it depends on an allowable claim.

> The office action further states, *"As per claim I 1, Edwards et al., discloses a method as recited in claim 7, wherein the classification process is an extendible classifier process (column 4, lines 19-32).*

In response, applicants respectfully state that a review of the referenced portion of Edwards et al., do not indicate that classification process is an extendible classifier process. Extend in Edwards et al., is for adding data to a node to allow it to store additional information. In claim 11, the classification process is extendible. Thus claim 11 is allowable over Edwards on its own right, and because it depends on an allowable claim.

> The office action further states, *"As per claim 17, Edwards discloses a method for determining disposition of a packet received at a child node, said method comprising: passing said packet and a first disposition of said packet to an external process (column 4, lines 1-11); and said external process augmenting the packet disposition by employing a process specific means (column 4, lines I -I 1); and returning the augmented packet and an augmented disposition to the child node (column 5, lines 15-25).*

In response, applicants respectfully state that a review of the referenced portion of Edwards et al., do not indicate any method for *determining disposition of a packet received at a child node,* based on an external process. *Thus claim 11 is allowable over Edwards* on its own right, and because it depends on an allowable claim.

> The office action further states, ***"As per claim 18, Edwards discloses a method as recited in claim 17, further comprising*** *suspending a disposition process in progress for said packet (column 5, lines 25-29).*

In response, applicants respectfully state that a review of the referenced portion of Edwards et al., do not suspend classification of a single packet, but suspends processing of all packets until the decision tree has been completely updated. Thus claim 18 is allowable over Edwards on its own right, and because it depends on an allowable claim.

> The office action further states, *"As per claim 19, Edwards discloses a method as in claim 18, wherein the augmented disposition includes identification of an originator of said packet (column 1, lines 19-26; column 13, lines 43-48).*

In response, applicants respectfully state that a review of the referenced portion of Edwards et al., do not indicate getting any identification of the originator of said packet from external information as in claim 19, but rather from a packet. header. Thus claim 19 is allowable over Edwards on its own right, and because it depends on an allowable claim.

> The office action further states, *"As per claim 20, Edwards a method as in claim 18 wherein the augmented disposition includes authentication of an originator of said packet (column 1, lines 19-26; column 3, lines 43-48).*

In response, applicants respectfully state that a review of Edwards et al., do not indicate getting any authentication of the originator of said packet from external information or any other source. Thus claim 20 is allowable over Edwards on its own right, and because it depends on an allowable claim.

> The office action further states, *"As per claim 21, Edwards et al., discloses a method as recited in claim 18, wherein the disposition is employed for policy enforcement (column 3, lines 8-15).*

In response, applicants respectfully state that a review of Edwards et al., do not indicate *employing a disposition for policy enforcement, but describes a high level view of a decision tree.* Thus claim 21 is allowable over Edwards on its own right, and because it depends on an allowable claim.

The office action further states, *"As per claim 36, Edwards discloses an article of manufacture comprising a computer-usable medium having computer readable program code means embodied therein for causing classification of a data packet, the computer-readable program code means in said article of manufacture comprising computer readable program code means for causing a computer to effect the steps of claim 8 (column 2, lines 47-67).*

In response, applicants respectfully state that a review of the referenced lines in Edwards et al., find no disclosure of an article of manufacture comprising a computer-usable medium having computer readable program code means embodied therein for causing classification of a data packet. Applicants claim 36 based on claim 8, is for an article of manufacture for classifying a packet by passing a packet through a tree. Edwards et al., do not perform the steps and or functions of the claim 36. Applicants respectfully state that Edwards et al., do not implement any of the steps in claim 36. A review of the referenced lines in Edwards et al., are not concerned with receiving a data packet, but rather are concerned with changing from one decision tree to another decision tree, not to classifying a packet.. It has no similarity to the present invention in claims 8 and 36, which classify a data packet. Furthermore Edwards et al., apparently do not pass the data packet to each child of the tree. Certainly Edwards et al., do not pass the packet until satisfaction of a node criteria is reached.

Claim 36 requires satisfaction of a node criteria. The present specification, page 11, lines 22-25, reads, "A child node's node-criteria includes a set of code used to identify the packets desired. This set of code is implemented as a function referred to as the packet matching function (pm) 603 . " A review of the referenced lines in Edwards et al. show no reference or concern of 'node-criteria'. Edwards et al., is not concerned with a node-criteria [which] includes a set of code used to identify the packets desired. Also, a 'node-criteria packet matching function' is in no way relevant to any of the cited references. Thus claim 8, and claim 36 that depends thereupon are allowable over Edwards et al, on their own right, and because it depends on an allowable claim.

The office action further states, *"As per claim 37, Edwards discloses a computer program product comprising a computer usable medium having computer readable program code means embodied therein for causing a determination of a disposition of a*

packet, the computer readable program code means in said computer program product comprising computer readable program code means for causing a computer to effect the steps of claim 18 (column 2, lines 47-67).

In response, applicants respectfully state that a review of the referenced lines in Edwards et al., find no disclosure of a computer program product comprising a computer usable medium having computer readable program code means embodied therein for causing a determination of a disposition of a packet, the computer readable program code means in said computer program product comprising computer readable program code means for causing a computer to effect the steps of claim 18, as in claim 37. Edwards et al., is apparently not concerned with disposition of a packet received at a child node, or the steps thereof as in claims 17, 18 and 37. Thus claim 37 is allowable over Edwards et al., on its own right, and because it depends on an allowable claim.

The office action further states, *"As per claim 39, Edwards discloses an apparatus for determining disposition of a packet received at a child node, said apparatus comprising: an interrupt context of a control program, said child node existing within the interrupt context (column 3, lines 22-29); an external process outside of the interrupt context of the control program (column 3, lines 56-67); means for passing said packet and a first disposition of said packet to the external process, said external process to augment the packet disposition by employing a process specific means and to return an augmented packet with an augmented disposition to the child node (column 4, lines 1-1 1; column 5, lines 15-25); and said interrupt context including means for receiving said augmented packet and said augmented disposition from said external process (column 4, lines 1-19).*

In response, applicants respectfully state that a review of the referenced lines in Edwards et al., find no apparent disclosure of an apparatus for determining disposition of a packet received at a child node. There is apparently no reference to the elements and respective interconnected functions of claim 39 on its own right, and because it depends on an allowable claim. Thus all 35 USC § 102 rejections are overcome and all the claims are allowable over the cited art.

Claim Rejections - 35 USC § 103

The office action further states, *"(Claims 6, 22, 29, 3 1, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doucer.*

In response, applicants respectfully state that *are patentable on their own right, and because it depends on an allowable claim.*

The office action further states, *"As per claim 6, Doucer discloses "a method as recited in claim 5, wherein said at least one child node employs the classification process for application level classification" (column 3 1, lines 40-67- column 32, lines 1-9). Doucer et al., do not expressly disclose "a Real Audio node". At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the application of Doucer with the claim limitation of Real Audio. A person of ordinary skill in the art would have been motivated to do this because Real Audio is a type of application.*

In response, applicants respectfully state that the Examiner is requested to provide backup for the statement made above, [that] A person of ordinary skill in the art would have been motivated to do this because Real Audio is a type of application. Doucer is concerned with, [an] "APPARATUS AND ACCOMPANYING METHODS, USING A TRIE-INDEXED HIERARCHY FOREST,, FOR STORING WILDCARD-BASED PATTERNS AND, GIVEN AN INPUT KEY, RETRIEVING, FROM THE FOREST, A STORED PATTERN THAT IS]IDENTICAL TO OR MORE GENERAL THAN THE KEY." The abstract reads, "A technique, specifically apparatus and accompanying methods, which utilizes a trie-indexed hierarchy forest ("rhizome") that accommodates wildcards for retrieving, given a specific input key, a pattern stored in the forest that is identical to or subsumes the key. 'The rhizome contains a binary search trie and a hierarchy forest. The search trie provides an indexed path to each unique, most specific, pattern stored in a lowest level of the hierarchy forest and also possibly to increasingly general patterns at higher levels in the pattern hierarchy. The hierarchy forest organizes the patterns into nodal hierarchies of strictly 'increasing generality. For use as a packet classifier, the rhizome stores wildcard-based packet classification patterns at separate corresponding pattern nodes, along with, corresponding 'reference" fields associated therewith. Operationally, as each different queue is established or removed,, a

corresponding classification pattern is either inserted into or removed from the rhizome. A search key is formed for each packet, typically by concatenating classification fields, e.g., source and destination addresses and source and destination port designations, appearing in ' a header of the packet. The search key is then applied to the rhizome to determine whether that key exists therein, by virtue of either matching an identical classification pattern or being completely subsumed within a more general pattern stored therein. When such a classification is found, the classifier returns the contents of the associated reference field,, which for scheduling, is a designation of a transmission queue to which the packet is to be directed."

Thus, there is no apparent reason to do what the office action states except to use hindsight to claim the invention in claim 6. Thus claim 6 is allowed over Doucer in its own right, and because it depends on an allowable claim.

> The office action further states, *"As per claims 22, 31 and 32, Doucer discloses "a method and apparatus as recited in claims 16 and 28 employing the classification process for security" (column 1, lines 45-53). Doucer does not expressly disclose a "firewall" or "border server" At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the security of Doucer with the claim limitations of firewall and border server. A person of ordinary skill in the art would have been motivated to do this because firewalls and border servers are a type of security measure used in networking.*
>
> *As per claim 29, Doucer discloses "an apparatus as recited in claim 28, wherein a portion of the apparatus is implemented as a processor retrieving a value from a data structure rapidly" (See claims 44-46 and column 4, lines I- 1 5). Doucer et al., do not expressly disclose "accelerator chip". At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the rapid retrieval of the processor of Doucer with the accelerator chip of the claim. A person of ordinary skill in the art would have been motivated to do this because an accelerator chip would speed up the processes of the processor.*

In response, applicants respectfully state that the Examiner is requested to provide backup for the statement made above, [that] [a] person of ordinary skill in the art would have been motivated to do this because an accelerator chip would speed up the processes of the processor. Thus, there is no apparent reason to do what the office action states except to use hindsight to claim the invention in these claims. A review of the referenced portions

indeed show that claims 22, 31 and 32 are allowable over Doucher on their own right, and because they depend on an allowable claim.

> The office action further states, *"Claim 24 is rejected under 35 U. S.C. 103(a) as being unpatentable over Doucer et al. U.S. Patent No. 5,995,971 in view of Edwards et al. U.S. Patent No. 6,3 20,848. Doucer discloses "a method recited in claim 23" (See claim 23). Doucer et al., do not expressly disclose, "wherein the disposition is employed for policy enforcement". Edwards discloses employing the disposition for policy enforcement. See column 3, lines 8-15. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine application level classification of Doucer with the policy enforcement of Edwards. A person of ordinary skill in the art would have been motivated to do this because the rules used to classify the packets for the applications are the same as the policies, or rules, enforced by Edwards.*

In response, applicants respectfully state that that the Examiner is requested to provide backup for the statement made above, [that] [a] person of ordinary skill in the art would have been motivated to do this because the rules used to classify the packets for the applications are the same as the policies, or rules, enforced by Edwards. *This is especially true since Doucer is not concerned with classifying a packet.* Thus, there is no apparent reason to do what the office action states except to use hindsight to claim the invention in claim 24. Thus claim 24 is allowed over Doucer in its own right, and because it depends on an allowable claim.

Furthermore, there is no apparent reason to combine Edwards with Doucer. Edwards et al. is concerned with, "METHODS OF ALTERING DYNAMIC DECISION TREES." The abstract reads, "A data packet switch includes a (Decision tree for classifying data packets, which can be dynamically modified." To conserve memory resources nodes which are found **during** modification to have matching effects are combined. If only a subset of paths to a node are relevant to a modification, the node is split. Prior to implantation of the modifications, temporary nodes arc inserted before modified nodes to preserve existing paths. These temporary nodes are controlled by a single memory value which can be changed to effect all the modifications to the decision tree simultaneously."

Thus, there is no apparent reason to do what the office action states except to use hindsight to claim the invention in claim 24. Thus claim 24 is allowed over Doucer, with or without Edwards, in its own right, and because it depends on an allowable claim.

Thus applicants respectfully state that all the claims rejected under 35 U.S.C. 101, and/or 35 U.S.C. 102, are amended herein. Thus all claims 1-39 as amended and/or as originally submitted are allowable.

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It is anticipated that this amendment brings the application to allowance of claims 1-39, and favorable action is respectfully solicited. In the unlikely event that any claim remains rejected, please contact the undersigned in order to discuss the application prior to any FINAL rejection.

Respectfully submitted,

By:_____

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